



Department
for Transport



Future of Flight

Jenny Ward, Deputy Director of Future of Aviation, Department of Transport
18th April 2024 ARPAS conference

1. Why Government consider these technologies important for the UK

- **Benefits to UK citizens through better services and societal benefits**
- **Environmental benefits through fewer emissions and use cases**
- **Green economic growth through jobs, exports, and investment**



Safer, faster and cheaper public services



Environmental benefits by reducing emissions



Economic growth and jobs



2. What is Government's approach



AMBITION AND LEADERSHIP
TO SET DIRECTION



WORK IN PARTNERSHIP



LEARNING BY DOING

Ambition and leadership



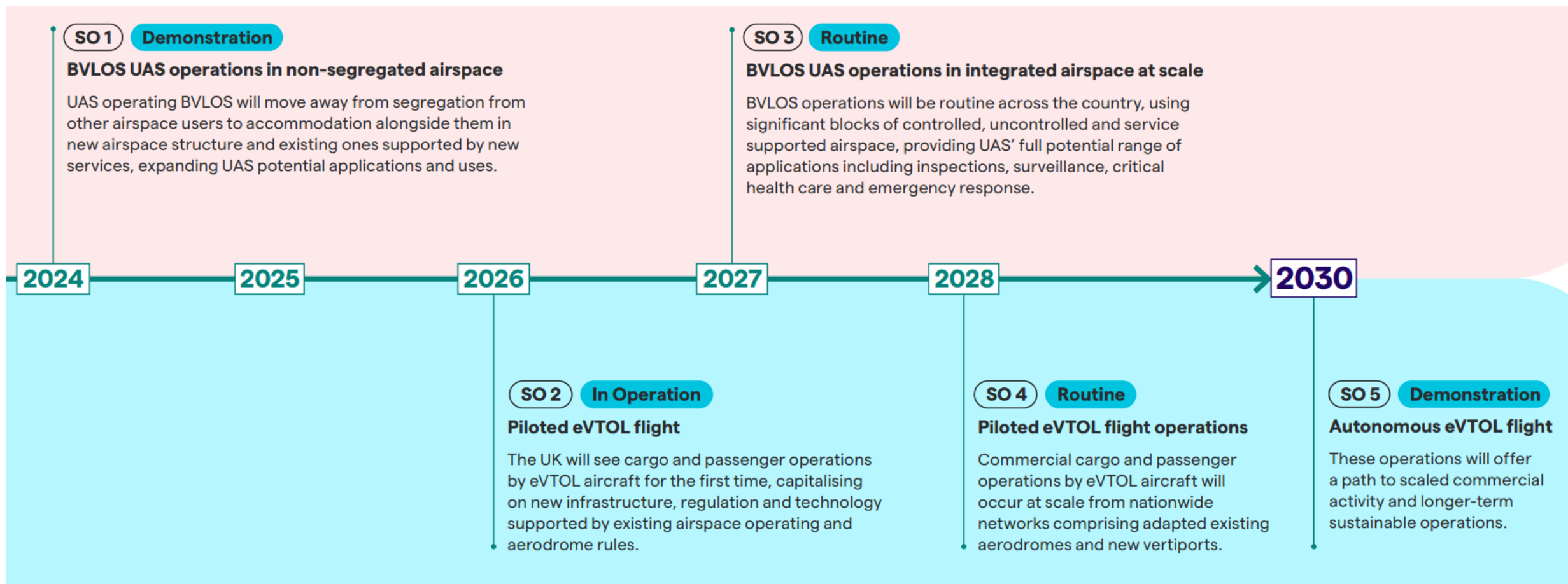
*Capturing the potential of new technology and its uses was outlined as one of ten priorities for the aviation sector over the next decade in “**Flightpath to the Future**”, May 2022.*

Set direction and work closely with industry and the regulator to develop and publish **a plan for the Future of Flight**. The plan will set out the steps the Government and the regulator will take over the next three to five years to facilitate bringing these new air mobility services to market.

Our vision is that **by 2030 commercial drones will be commonplace in the UK in a way that safely benefits the economy and wider society**. Drones will deliver new capabilities, boost productivity and reduce emissions and risk to life, while sharing airspace equitably and safely with other users”.

Drones Ambition Statement, July 2022

Future of Flight Action Plan - Strategic Outcomes



Working with industry-The Future of Flight Industry Group

“

NATS

Bristow

Skyports
INFRASTRUCTURE

aerospace
defence
security
space
ADS

Joby
AVIATION

UK
Civil Aviation
Authority

LOGISTICS UK

VERTICAL

UKRI
UK Research
and Innovation

ALTITUDE
—ANGEL—

DRONE INDUSTRY
ACTION GROUP

ARPAS-UK
Association of Remotely Piloted Aircraft Systems

CATAPULT
Connected Places

AEROSPACE
TECHNOLOGY
INSTITUTE

Local
Government
Association

Regional
& Business
Airports Group

BBGA
BRITISH BUSINESS & GENERAL AVIATION ASSOCIATION

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The FFIG brings together senior figures from Central Government, the independent Regulator, and Industry. It was set up in February 2023 to develop and deliver a Future of Flight Action Plan. It meets quarterly and the last meeting was in March.



Working across Government



Department for
Business & Trade



Department
for Culture
Media & Sport



Department for Levelling Up
Housing & Communities



Department
of Health &
Social Care



Innovate
UK



UK
Civil Aviation
Authority



Ministry
of Defence



METROPOLITAN
POLICE



Ministry
of Justice



Department for
Science, Innovation,
& Technology



Home Office



Working internationally



ICAO

Learning by doing

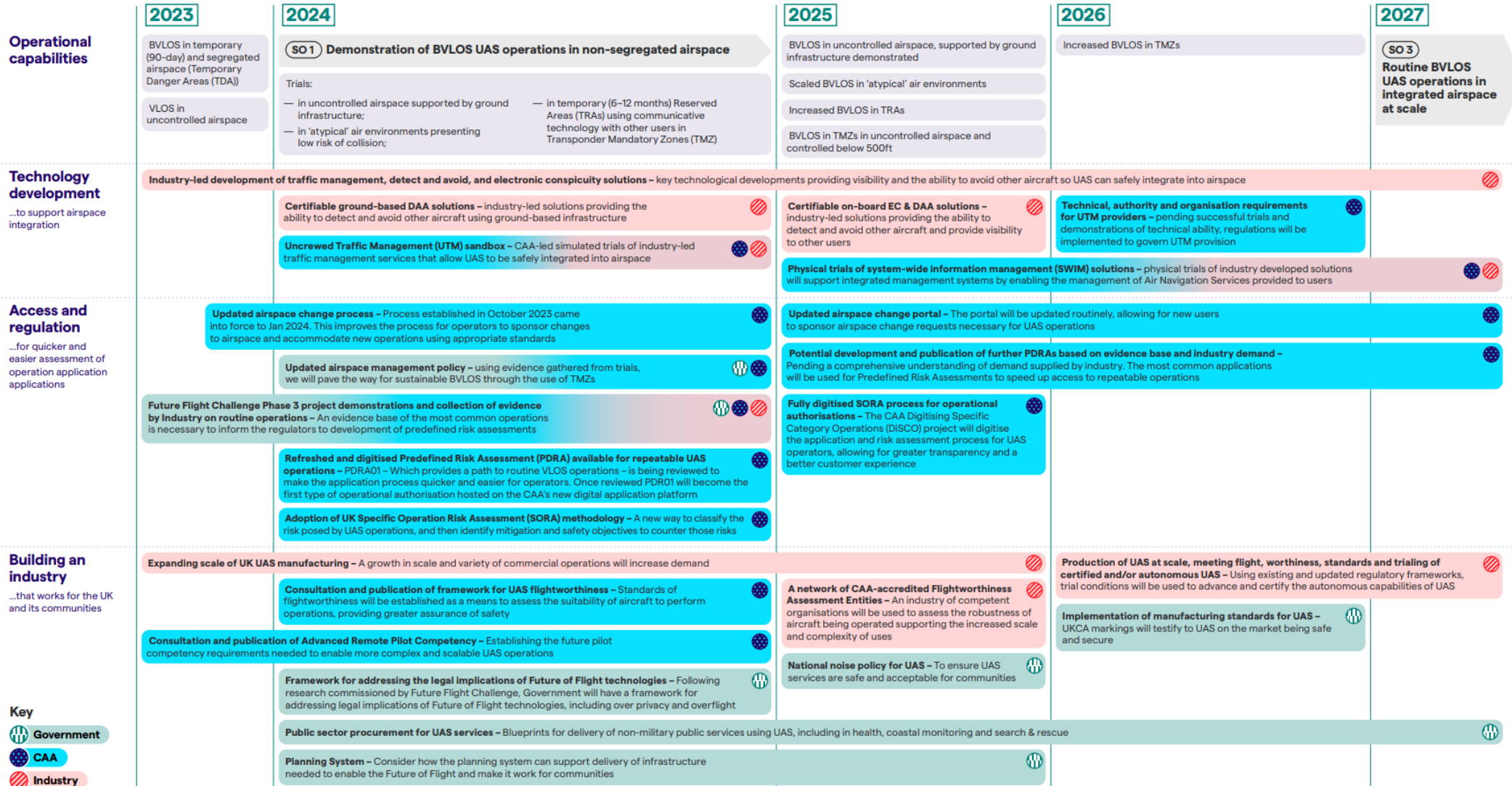
“The Future Flight Challenge will build on the UK’s leading position in aerospace and aviation to develop technologies which will deliver benefits across the environment, the economy and society”

Professor Sir Mark Walport
Chief Executive, UK Research and Innovation



3. What is the UAS pathway

UAS Pathway to Achieving Strategic Outcomes 1 & 3



Key

- Government
- CAA
- Industry

Community Integration

Engage communities early and consistently. Ensure technologies deliver the benefits and concerns are addressed.

Actions

Government will support local authorities in introducing Future of Flight into planning and communities. The Government intends to consult on the introduction of new National Development Management Policies and corresponding changes to the National Planning Policy Framework this year, which will be subject to a public consultation and Strategic Environmental Assessment. The Department for Transport will work closely with the Department for Levelling Up, Housing and Communities (who are responsible for national planning policy) and expect that any future aviation and planning policy we consider will continue to build on the existing framework.

Industry will work with Local Authorities on locally-appropriate solutions.

Industrialisation

Support UK industrialisation of UAS and eVTOL supply chains through access to scale-up and export finance.

Actions

Government and **Industry** will develop joint industry-government mechanisms to support industrialisation post Future Flight Challenge.

Skills & People

Create a community of professional staff including pilots, engineers and designers, through world-leading training programmes and education pathways supported by standards.

Actions

Industry will invest in UK aviation skills and pilots continuously.

Government will publish a skills gap analysis and acquisition strategy in 2024.

Digital Infrastructure

Connect stakeholders digitally, across a secure UK-wide network that supports a safe and efficient ecosystem.

Actions

Industry will undertake a consultation in 2024 and deliver digital services to support safe airspace integration in 2025.

Government will explore introducing 'Digital' flight rules for digital operation of aircraft.

Standardisation

Develop industry-wide interoperability and harmonisation of solutions, using new standards.

Actions

Industry will steer the creation of effective standards through BSI's Future Flight Standards Programme.

Government will ensure consideration of industry standards by regulatory and legislative frameworks.

Autonomy

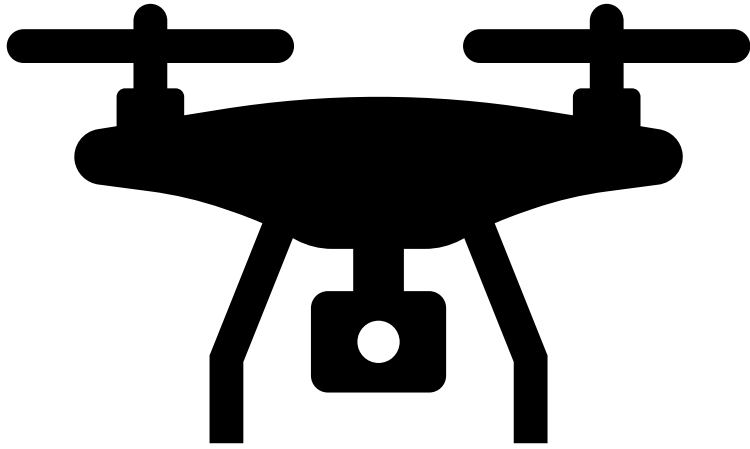
Develop autonomous capabilities offering the ability for aircraft to safely deliver function and services at maximum scale with a diminishing level of human involvement.

Actions

Industry will continuously develop safe autonomous capabilities and systems, working with the CAA to trial and certify these.

Government will review the legal challenges of autonomous flight by 2025 and update the legal framework accordingly in response to findings.

Technology Development to support airspace integration



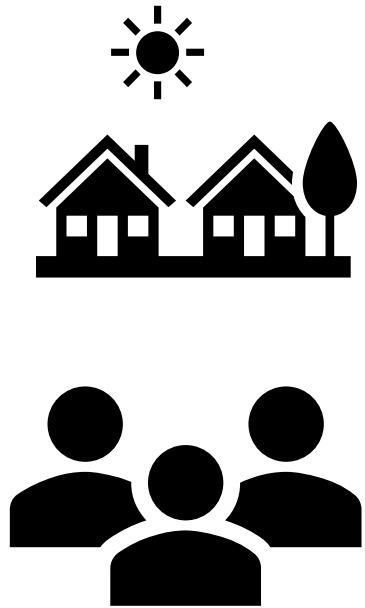
Including technologies and trials of electronic conspicuity, detect and avoid, integrated airspace management

Access and regulation for quicker and easier assessment of operation applications

For example, digitising assessment, and pre-risk defined assessments



Building an industry that works for the UK and its communities



Including setting pilot competencies, flightworthiness, product standards, noise policies, planning guidance, regulatory framework for autonomous operations etc...)



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Questions?

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